tion struggle to keep up with everchanging information about retrieval techniques and technology that must be taught to students, it may be difficult to remember that instilling these skills is not our ultimate goal. Technology and techniques are not ends in themselves but simply media for information. What students must learn goes deeper than finding information: they must acquire and assimilate knowledge to use in their personal and professional lives and learn how to make their own unique contributions for expanding and improving their fields. How can academic librarians best facilitate this learning process? Why should college administrators and classroom faculty include librarians as part of the learning facilitation team?

In Future Teaching Roles for Academic Librarians, Editor Alice Harrison Bahr has found three academic librarians and three nonlibrarians involved in higher education to describe rationales and practical suggestions for addressing these issues. The authors point out the need to reevaluate traditional library instruction, and they encourage an "interface" between classroom faculty and librarians that is closer than an invitation to do the occasional course-related guest lecture. Rather than talking at passive students, the authors recommend "learning by doing," with librarians available to advise and facilitate students' searches for knowledge in print and electronic resources. They recommend designing learning strategies that encourage lifelong learning, rather than memorization of facts and figures. Few of these recommendations will seem new, either to librarian educators or to other college faculty, but the six authors stick admirably to these themes and encourage readers to think about the themes' importance. The ideas in this book, written primarily for those involved with undergraduate students in all of academe, are important for health sciences librarians to consider for the undergraduate, professional, and graduate students who are their primary constituents.

George Allen, a philosophy professor and author of the chapter "The Art of Learning with Difficulty," encourages librarians to converse with students rather than lecture in library instruction classes. He points out that our expertise is not so much in our subject knowledge but in knowing how to go about finding answers to questions. "This confidence is not merely your trademark. It's the trademark of the sort of person you want students to be ... exemplars of good sense regarding the identification and retrieval of information" (p. 19).

In the chapter "From Transmission to Research: Librarians at the Heart of the Campus," Harvard University Professor James Wilkinson encourages both classroom faculty and librarians not to expect students to "parrot" information but help them to frame their own questions and learn how to find the answers. Research is necessary for true learning, and librarians are uniquely positioned to assist this process and help students cope with data overload. The alternative teaching and learning model he describes (pp. 30–1) resembles the rationale behind problem-based and evidence-based learning that has become prevalent in medical curricula over the past decade.

Other chapters make important points along these and related lines, but perhaps the most unique and useful chapter is the final one, "From the Other Side of the River: Reconceptualizing the Educational Mission of Libraries," by Barbara MacAdams, head of educational and information services at the University of Michigan Library. She encourages librarians to "get inside the heads" of modern-day students and try to understand and respect their environment, pres-

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As librarians active in user educa-

sures, perceptions, and consequent information-seeking behaviors. Speaking to her readers as if they were students, she points out that "your time matters to you, and you are outcome oriented, so you measure success by the result, not by a separately constructed set of values" (p. 83). Given this, librarians need to understand that formal search strategies may not seem practical to busy students who have grown up in the age of the Web, and they will not assimilate strategies when we try to teach them. Once we understand their world view, we will structure our information retrieval interfaces and reference, document delivery, and instruction services to fit their needs instead of our own. Not that formal research strategy is invalid, but we must find ways to make it relevant and useful to the students of the twenty-first century.

Here and there in many of the chapters, there is a sense that these authors are not dazzled by the possibilities of the "virtual library." The advent of the paperless library is acknowledged, but there are warnings about the dangers of emphasizing technology and delivery over content and knowledge. The emphasis is on old-fashioned, faceto-face interaction between faculty, librarians, and students as partners in learning. Indeed, Arizona State University Professor Howard L. Simmons spends a good portion of his chapter, "Librarian as Teacher: A Personal View," reminiscing about librarian mentors during his own high school and college years, demonstrating the positive influence those in our profession can have on new scholars. "No matter what librarians are called in the profession or how much more technology is used to access information through the medium of the library and information resources, the most effective librarians in the new millennium will be those who empower learners and who facilitate the teaching and learning process" (p. 44).

Although this volume is recommended for careful reading by all librarians, including health sciences librarians, who are involved in instructional services, it should also be promoted to higher education administrators and faculty who determine course content and methods of delivery. In a sense, this book is "preaching to the choir" if it is read only by individuals in our profession. Given the chronic insufficiencies of professional staffing and budgets in most academic libraries, the level of curriculum involvement that the authors encourage, with the time and resources such involvement would require, may seem unrealistic to some librarians. However, their emphasis on the necessity of librarians' enhanced teaching roles may help us make the necessary arguments to get priority for new librarian positions and other resources when opportunities arise.

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